

CLS-DTH Duct Temperature & Humidity Transmitter

Applications & Features

- Designed for duct Humidity and temperature monitoring
- High performance digital sensors and circuits, ensure accurate measurement and temperature compensation
- Digital technology applied, multiple outputs optional, over voltage and reverse polarity protection, high reliability and anti-interference capability
- Good long term stability and reliability
- 100% field changeable sensor without re-calibration
- Fast response
- High protection rate up to IP65

Specifications

Relative Humidity

Sensor: Digital polymer

Range: 0~100%RH

Output: 0-10VDC(3 wires), 4-20mA(2 wires)

Accuracy: 3%@25°C & 20~80%RH

Hysteresis: <±1%RH

Response time: <10s (25°C, in slow air)

Drift: <±0.5%RH / year

Temperature

Sensor: RTD

Range: -30~70°C

Output: PT1000/ NTC10K-II

Accuracy: PT1000, ±0.2°C@25°C, NTC10K-II, ±0.4°C@25°C

Power: Current: 18.5~35VDC ($R_{load}=500\Omega$)

8.5~35VDC ($R_{load}=0\Omega$)

Voltage: 16~28VAC/ 16~35VDC

Output Load: ≤500Ω (current), ≥2KΩ (voltage)

Work Temp.: -30~70°C

5~95%RH (Non condensing)

Housing: Fireproof ABS housing, UHMW-PE filter

Protection: IP65

Weight: 360g

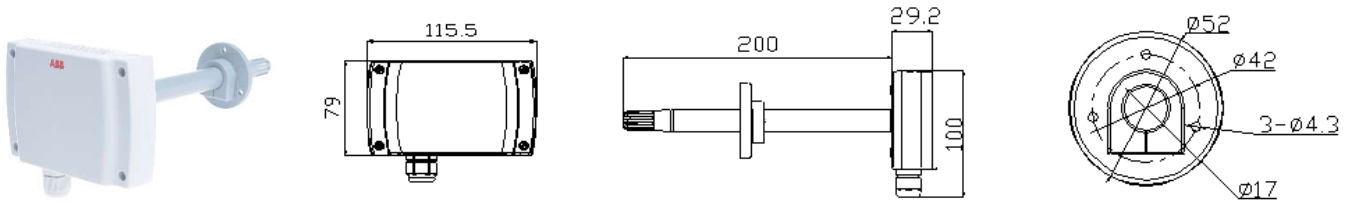
Approval: CE

Selection table

ABB series	Description
CLS-DTH-3V100	Duct Temperature & Humidity Transmitter, PT1000, 0~10V, ±3%RH, 35~186mm, IP65
CLS-DTH-3A100	Duct Temperature & Humidity Transmitter, PT1000, 4~20mA, ±3%RH, 35~186mm, IP65
CLS-DTH-3V200	Duct Temperature & Humidity Transmitter, NTC10K-II, 0~10V, ±3%RH, 35~186mm, IP65
CLS-DTH-3A200	Duct Temperature & Humidity Transmitter, NTC10K-II, 4~20mA, ±3%RH, 35~186mm, IP65

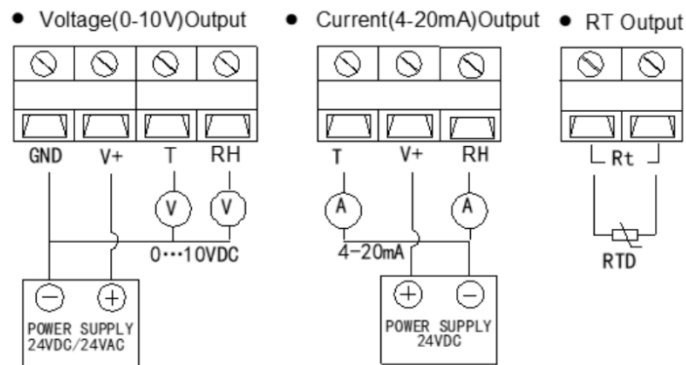
*Current 4-20mA Output: terminal RH loop should be connected, otherwise the transmitter can not work.

Appearance & size

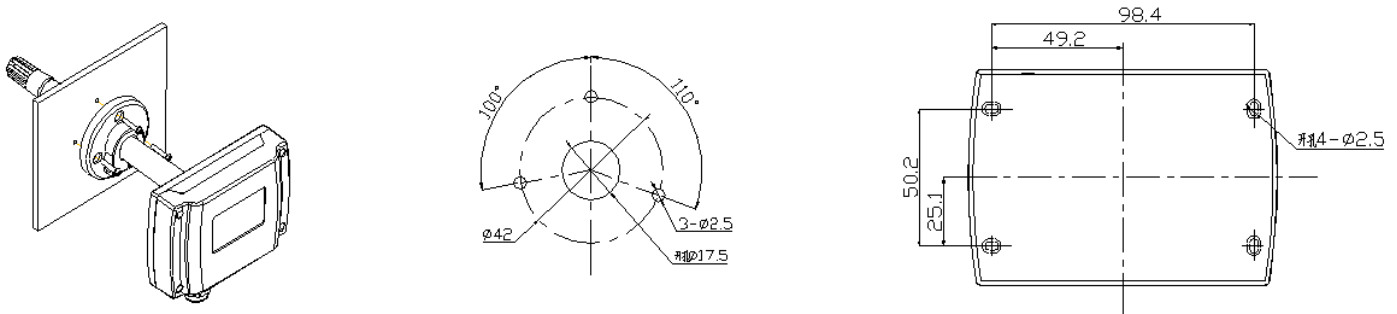


Connection

Different models have different electrical terminals. Please wire specific model according to the wiring diagram inside the front cover.



Installation and description



- The install flange kit is recommended for installing the CLS-DTH. The depth being inserted can be adjusted. Install the kit on the duct with 3 screws, and use another screw to tighten the probe and the whole CLS-DTH. the duct hole($\phi 17.5\text{mm}$) should be air-tight after installation.
- Open the front cover, install the drain on the base and take the wires from DDC/PLC, etc. into the base through the drain, then finish wiring according to the diagram inside the cover and restore the front cover. Make sure to install the drain with the base and the base with the front cover all completely air-tight (there are two seal rings between the drain and the base, and the front cover and the base), to prove the whole housing can meet up to IP65.

Attention

It should be power OFF during installing and wiring. When using 24VAC, it is strongly recommended to power the unit with independent transformer. If sharing a 24VAC transformer with other equipments such as controllers, transmitters or actuators, please make sure the terminals 24V and GND are connected correctly. Otherwise, it will perhaps induce serious damages.

Maintenance

ABB LV Installation Materials Company Limited, Beijing CN

No.17 Kang ding Street, Beijing Economic-Technological Development Area 10076, P.R. China. Zip code: 100176

Scan the QR code to go ABB official web page and get more product info

Warning! Installation by person with electrotechnical expertise only.

Warnung! Installation nur durch elektrotechnische Fachkraft.

Avvertenza! Fare installare solo da un elettricista qualificato.

Avertissement! Installation uniquement par des personnes qualifiées en électrotechnique.

¡Advertencia! La instalación deberá ser realizada únicamente por electricistas especializados.